Nutrition screening and primary care: Identifying malnutrition early in seniors

ritish Columbia's population is rapidly aging: the number of adults in BC who are 65 years of age or older exceeded 1 million for the first time in 2021, and those who are over 85 years of age make up the fastest-growing age group in Canada.1 These demographic trends will create additional pressures on the health care system due to increased demands for care among the aging population. To reduce the burden on BC's health care system, it will be important to consider strategies and practices that can help older adults live healthily and independently.

Malnutrition is a common yet often overlooked health issue among older adults. It is defined by the Canadian Malnutrition Task Force as "both the deficiency and excess of energy, protein, and other nutrients."2 One-third of Canadians 65 years of age or older are at risk for malnutrition.3 The impact of malnutrition on older adults is well documented, including reduced quality of life, increased hospitalizations, and higher risk of mortality.3 Malnutrition also contributes to complex health concerns, with malnourished older adults experiencing delayed wound healing, impaired functional status, weakened immune function, and increased risk of frailty and falls.^{4,5} Malnourished older adults are, therefore, less likely to retain the ability to live independently and have a significantly increased risk of acute hospitalization.^{3,4}

The health consequences of malnutrition among older adults also impose considerable costs on the health care system. A 2017 study of adults admitted to Canadian hospitals found patients who were malnourished experienced

This article is the opinion of the BC Centre for Disease Control and has not been peer reviewed by the BCMJ Editorial Board.

18% longer stays and 31% to 34% higher costs compared with those who were well nourished.6 On average, malnourished surgical patients incurred \$2851 more in hospital costs than well-nourished patients and were nearly twice as likely to experience hospital readmission within 15 days. Implementation of nutrition programs can result in considerable savings to the health care system. In one home

> Malnutrition is a common yet often overlooked health issue among older adults.

health setting, the implementation of a multisite nutrition-focused quality improvement program resulted in a reduction in the need for patients to seek health care services such that savings amounted to \$1500 per patient or \$2.3 million over a 90-day period. Small investments can return substantial cost savings; for every \$1 spent on dietitian-led nutrition interventions, the health care system can save \$5 to \$99 through reductions in costs associated with hospitalizations, medications, and physician time.8

Nutrition screening, which can identify patients at risk of malnutrition, helps to prioritize resources, improve referral processes for dietitians and community services, and assist care providers in targeting interventions for specific nutritional needs.^{9,10} Nutrition screening tools for older adults that are valid, reliable, and simple to conduct are available, such as Seniors in the Community: Risk Evaluation for Eating

and Nutrition and the Mini Nutritional Assessment.11 Although nutrition screening for older adults is often done in acute care settings, a preventive approach that addresses the underlying causes of malnutrition requires earlier discovery and intervention in the community.¹² Family physicians and other community-based primary care practitioners may be well positioned to offer preventive nutrition screening and care. 12 Successful implementation of nutrition screening will need to address current challenges in primary care, such as time constraints and varying access to dietitians across BC. Primary care providers can advance nutrition for older adults by incorporating nutrition screening into regular care practice, collaborating with allied health care professionals such as dietitians, and mobilizing conversations and actions that raise awareness and build capacity for older adult nutrition screening.

- -Sarah Dunn, MPH Practicum Student
- -Rola Zahr, MPH, RD
- -Geoffrey McKee, MD, MPH

References

- 1. Statistics Canada. Census profile, 2021 census of population. Accessed 23 June 2022. www12.statcan.gc.ca/ census-recensement/2021/dp-pd/prof/index.cfm.
- Canadian Malnutrition Task Force. Malnutrition overview. Accessed 23 June 2022. https://nutritioncarein canada.ca/about-us/malnutrition-overview.
- Ramage-Morin PL, Gilmour H, Rotermann M. Nutritional risk, hospitalization and mortality among communitydwelling Canadians aged 65 or older. Health Rep 2017;28:
- Norman K, Haß U, Pirlich M. Malnutrition in older adults—Recent advances and remaining challenges. Nutrients 2021;13:2764.
- 5. Norman K, Pichard C, Lochs H, Pirlich M. Prognostic impact of disease-related malnutrition. Clin Nutr 2008;27:5-15.
- 6. Curtis LJ, Bernier P, Jeejeebhoy K, et al. Costs of hospital malnutrition. Clin Nutr 2017;36:1391-1396.
- Riley K, Sulo S, Dabbous F, et al. Reducing hospitalizations and costs: A home health nutrition-focused

BCCDC

- quality improvement program. JPEN J Parenter Enteral Nutr 2020:44:58-68.
- 8. Howatson A, Wall CR, Turner-Benny P. The contribution of dietitians to the primary health care workforce. J Prim Health Care 2015;7:324-332.
- 9. Hensrud DD. Nutrition screening and assessment. Med Clin North Am 1999;83:1525-1546.
- 10. Keller HH, Brockest B, Haresign H. Building capacity for nutrition screening. Nutr Today 2006;41:164-170.
- 11. Canadian Malnutrition Task Force, Nutrition screening tools for community-dwelling older adults. Accessed 23 June 2022. https://nutritioncareincanada .ca/sites/default/uploads/files/Pathways/Guide_to _Nutrition_Screening%20Tools%20for_Community -Dwelling_Older%20.pdf.
- 12. Laur C, Keller H. Making the case for nutrition screening in older adults in primary care. Nutr Today 2017;52:129-136.

COHP

Continued from page 317

must inform our public health strategies and individual practices to achieve optimal health for all. Capitalizing on the increased vaccine literacy created by the COVID-19 pandemic is an opportunity that must be seized.

- —Jennifer Balfour, MD, FRCPC
- —Aven Poynter, MD, FRCPC **Members, Council on Health Promotion**

References

- 1. BC Centre for Disease Control. Immunization coverage reports. Accessed 26 July 2022. www.bccdc.ca/ health-professionals/data-reports/immunizations.
- 2. MacDonald SE, Paudel YR, Kiely M, et al. on behalf of the COVImm study team. Impact of the COVID-19 pandemic on vaccine coverage for early childhood vaccines in Alberta, Canada: A population-based retrospective cohort study. BMJ Open 2022;12:e055968.
- 3. UNICEF. COVID-19 pandemic leads to major backsliding on childhood vaccinations, new WHO, UNICEF data shows. Accessed 26 July 2022. www.unicef .org/press-releases/covid-19-pandemic-leads -major-backsliding-childhood-vaccinations-new -who-unicef-data.

PREMISE

Continued from page 316

- for transgender and gender creative youth. Psychol Sex Orientat Gend Divers 2021. doi:10.1037/ sgd0000504. Advance online publication.
- 34. Steensma TD, Biemond R, de Boer F, Cohen-Kettenis PT. Desisting and persisting gender dysphoria after childhood: A qualitative follow-up study. Clin Child Psychol Psychiatry 2011;16:499-516.
- 35. Roberts C. Persistence of transgender gender identity among children and adolescents. Pediatrics 2022;150:e2022057693.
- 36. Turban JL, Loo SS, Almazan AN, Keuroghlian AS. Factors leading to "detransition" among transgender and gender diverse people in the United States: A mixed-methods analysis. LGBT Health 2021;8:273-280.
- 37. Turban JL, Carswell J, Keuroghlian AS. Understanding pediatric patients who discontinue genderaffirming hormonal interventions. JAMA Pediatr 2018;172:903-904.
- 38. Turban JL, Keuroghlian AS. Dynamic gender presentations: Understanding transition and "de-transition" among transgender youth. J Am Acad Child Adolesc Psychiatry 2018;57:451-453.
- 39. Littman L. Individuals treated for gender dysphoria with medical and/or surgical transition who subsequently detransitioned: A survey of 100 detransitioners. Arch Sex Behav 2021:50:3353-3369.
- 40. Chew D, Anderson J, Williams K, et al. Hormonal treatment in young people with gender dysphoria: A systematic review. Pediatrics 2018;141:e20173742.
- 41. Trans Care BC. Provincial Health Services Authority. Puberty blockers for youth. Accessed 23 April 2022. www.phsa.ca/transcarebc/child-youth/affir mation-transition/medical-affirmation-transition/ puberty-blockers-for-youth.
- 42. Bustos SS, Bustos VP, Mascaro A, et al. Complications and patient-reported outcomes in transfemale vaginoplasty: An updated systematic review and meta-analysis. Plast Reconstr Surg Glob Open 2021;
- 43. Shrier A. Top trans doctors blow the whistle on "sloppy" care. Common Sense. 4 October 2021. Accessed 1 June 2022. https://bariweiss.substack .com/p/top-trans-doctors-blow-the-whistle.
- 44. Zaliznyak M, Lauzon M, Stelmar J, et al. A proposed inventory to assess changes in orgasm function of transgender patients following gender affirming treatments: Pilot study. Sex Med 2022;10:100510.
- 45. Bouman M-B, van der Sluis WB, van Woudenberg Hamstra LE, et al. Patient-reported esthetic and functional outcomes of primary total laparoscopic intestinal vaginoplasty in transgender women with penoscrotal hypoplasia. J Sex Med 2016;13:1438-1444.
- 46. Blasdel G, Kloer C, Parker A, et al. Coming soon: Ability to orgasm after gender affirming vaginoplasty. J Sex Med 2022:19:781-788.
- 47. Government of Canada. Bill C-4: An Act to amend the Criminal Code (conversion therapy). Accessed 23 April 2022. www.justice.gc.ca/eng/csj-sjc/pl/ charter-charte/c4_1.html.

Switching from print to online

Switching from our print edition to online is a simple 2-step process:

- 1. Email "stop print" to journal@ doctorsofbc.ca, providing your name and address.
- 2. Go to bcmj.org and click on the "Free e-subscription" button on the right, providing only your name and email address. You will receive the table of contents via email notices, letting you know when a new issue is online (10/year).

